

December 19, 2011

**Via Electronic Filing**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

RE: Notice of *Ex Parte* Meeting

**MB Docket No. 11-154**

Dear Ms. Dortch:

Pursuant to Section 1.1206 of the Commission's rules, Computer Prompting & Captioning Co. (CPC), is filing this ex parte communication to address the issue of extracting closed caption data from videos produced prior to 2006 for conversion into web read closed caption files. This issue has arisen regarding the Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty First Century Communications and Video Accessibility Act of 2010 ("CVAA"), Media Bureau docket no. 11-154. CPC is writing to inform the FCC that technology currently exists to easily and quickly extract closed caption data from videos produced and aired prior to 2006.

CPC has been developing closed captioning software since 1986. Many broadcasters use CPC's software to easily extract closed caption data from video files and videotapes that were created both before and after 2006.

Our purpose in writing this Ex Parte is to inform the FCC that there are and have been readily available and simple-to-use software technologies that will extract TV closed caption data in order to convert it to the various closed caption web file formats, and that closed captioning technologies as they exist in analog and digital tape masters are the same in 2011 as they were prior to 2006.

**Multiple Caption Format Conversion Capabilities Currently Available**

At the 2011 National Association of Broadcasters conference in Las Vegas, NV, Giovanni Galvez of CPC was invited to speak regarding the push to convert TV closed captioning to web video closed captioning to comply with the CVAA. In front of a live audience at the conference, Mr. Galvez demonstrated how to extract and convert closed caption data from a live TV feed to SMPTE timed text, while preserving all the necessary text formatting and positioning.

During the first quarter of 2011, CPC developed software to convert both CEA-608 and CEA-708 to SMPTE Timed Text and other compatible closed captioning file formats for YouTube, iTunes, Hulu, and others.

## **Conversion of Line 21 Captions from Analog and Digital Video Produced Prior to 2006**

The original closed captioning data that was aired resided in an analog TV signal. This portion is referred to as VBI (Vertical Blanking Interval) in Line 21 of the video signal. For both live and recorded standard definition closed captioned video prior to 2006, the VBI was present in all analog and digital video feeds from the broadcaster. During this time CPC developed software to extract the Line 21 VBI captions from the video signal and convert them to various other formats including DVD closed captioning and Windows Media closed captioning via SAMI file.

In 2011, many broadcasters still deliver and archive tape masters that contain Line 21 VBI with closed caption data. The technology of closed captioning to standard definition tape masters is the same as it was prior to 2006.

*Therefore, the software solution to extract closed caption data from standard definition analog and digital video has been readily available for more than the past 10 years.*

## **Conversion of Digital VANC Line 9 Captions from Digital High-Definition Video Produced Prior to 2006**

Closed captioning data in High Definition (HD) videotape masters resides in the VANC (Vertical Ancillary Data Space) in Line 9 of the video signal. This is true for both live and recorded high-definition video prior to 2006 that contains closed captioning. In 2011, many broadcasters continue to deliver HD videotape masters to the broadcasters. There is no difference in the technology for closed captioning High-Definition videotape masters before or after 2006. In 2011, many broadcasters use the same hardware equipment, such as closed caption encoders and HD video tape recorders, that was used to prior to 2006.

*During this time, CPC developed software to extract VANC Line 9 closed caption data from HD videotape masters in order to edit, convert, and manage closed captioning text for web video delivery.*

## **Conversion of ATSC Video Signal Closed Captions to the Web**

Despite the fact that a TV show was originally closed captioned prior to 2006, it must be converted to an ATSC signal for delivery to home viewers after 2006. ATSC signals contain both CEA-608 and CEA-708 captions in the user data packets of the video. These signals can be recorded and archived to a computer hard drive.

*CPC software has a unique feature that can extract both the CEA-608 and CEA-708 data from the ATSC video files that are present on the hard drive.*

## **Speed and Cost of Extracting and Converting Closed Caption Data to the Web**

If the closed captioned video signals were stored only on videotape masters, the CPC software would only be able to extract the closed captioning data in real-time. However, because all videos that are presently aired must be converted to digital video files on a

computer hard drive, the closed captioning data extraction can be automated and can be much faster than real-time. Once the closed caption data is extracted, the conversion to various web formats such as SMPTE Timed Text, is virtually instantaneous. This is true even with low cost CPC encoder software.

*Since many broadcasters already own CPC software, there is an opportunity to take advantage of these unique closed caption data extraction features without any additional cost.*

## **Summary**

Technology such as CPC's closed caption extraction software demonstrates that closed captioning data can be easily extracted from video that was aired prior to 2006, making the migration of closed caption data to the web very feasible for any broadcaster.

Respectfully submitted,

/s/

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